Memo

To: Dan Heister

From: Janice Panichello

CC: Dave Stone
Amanda Guay
Karen Larson
Julie Wroble
Cliff Walkey

Date: September 3, 2003

Re: Lead Samples at North Ridge Estates

Thanks, Dan, for the opportunity to review the initial sampling results for lead and other metals from the North Ridge Estates Subdivision site. We are looking forward to receiving the sampling results after EPA has completed the QA/QC review.

In the health consultation we completed in April 2003, we (DHS Superfund Health Investigation & Education program) recommended that sampling for lead be conducted at the site to determine whether soil at the site has elevated lead levels due to the lead-based paint that was used on the military buildings demolished at the site. We were encouraged to see such low lead levels throughout the subdivision in the soil samples taken in July 2003. Five samples were taken on each of 24 lots, and two to three samples were taken on each of ten lots. Elevated levels of lead were found through XRF screening in only two of the 150 samples. Laboratory confirmation of the two samples (as well as ten percent of the samples throughout the site) indicated an elevated lead level in only one of the samples.

As you know, EPA has two risk levels when evaluating lead in residential soil – 400ppm and 1200ppm. The 400ppm level applies to areas of bare soil where children age 6 and under play. It is an "averaged" level, i.e. it is not based on one individual sample in a play area; it is the average of several individual samples or a composite sample of the soil in the play area. The 1200ppm level applies to other areas of bare soil on the lot. Again, the 1200ppm threshold is not based on one

individual sample, but is an average of several samples or a composite sample of the bare soil on the lot.

Sampling using XRF indicated elevated levels in one sample on the Orlando property (444ppm) and in one sample on the MBK lot west of the Micka property (1030ppm). Confirmational laboratory analyses (EPA Method 7000B, atomic absorption) on these two samples found the Orlando sample to be 320ppm, and the MBK sample to be 1,500ppm. Sampling results for the four other samples on the Orlando lot were 134.2ppm; 155.4ppm; 93ppm; and <LOD (below the detection level for the sampling methodology), and for the MBK lot were 36ppm; 46ppm; and two samples <LOD. The 1500ppm level on the MBK lot was from a sample taken near the eastern boundary of the MBK lot adjacent to the western boundary of the Micka property. Lead sampling results on the Micka property were 44ppm, 25ppm, and two samples <LOD. Samples on the Micka property, according to the sampling map by Ecology and Environment, Inc., were taken primarily in the eastern area of the Micka property in the vicinity of a debris burial site.

It is unknown at this time whether this sampling result is an isolated elevated spot. Additional sampling on the eastern area of the MBKC lot and the western area of the Micka lot is recommended to determine whether the averaged area of bare soil in this area of the two lots exceeds 1200ppm, and to further define the area of high lead levels. Based on the phone conversation I had last week with Cliff Walkey, it is my understanding that when determining cleanup requirements at a site, DEQ takes into consideration whether children and adults are, or are likely to, access the lead-contaminated soil. This information is important, as well, for DHS evaluation of health risks from exposure to lead in the soil.

As there are children in the Micka residence, we also recommend that dust wipe samples for lead be taken in the Micka home (as permitted), particularly if it is determined that the area of contamination is larger than one small isolated area of the MBK lot.

There is not enough evidence at this time to indicate an elevated health risk from exposure to lead at the North Ridge Estates site. If parents are greatly concerned, however, testing for blood lead levels may be requested from their family physicians. The testing is simple and inexpensive, and evaluates blood lead levels from recent (last few months) exposures. (It will not evaluate chronic exposure.)